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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,202	04/08/2004	Pierre Broun	056100-5005-01-US	7462
9629 7590 09/26/2007 MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			EXAMINER MCELWAIN, ELIZABETH F	
			ART UNIT 1638	PAPER NUMBER
			MAIL DATE 09/26/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/820,202

Applicant(s)

BROUN ET AL.

Examiner

Elizabeth F. McElwain

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 43,46,47 and 50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 43,46,47 and 50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The amendment filed July 10, 2007 has been entered.

Claims 1-42, 44, 45, 48 and 49 are cancelled.

Claims 43 and 47 are newly amended.

Claims 43, 46, 47 and 50 are pending and are examined on the merits.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

1. Claims 43, 46, 47 and 50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 43 and 47, and claims 46 and 50 dependent thereon, are indefinite in that the nucleic acid of the claims encodes a "mutant" form of a fatty acid desaturase which is mutated as compared to wild type. However, mutant is a relative term in that any sequence that differs from a wild type sequence may be considered a mutant sequence, but the present claims do not recite what would be considered the wild type sequence that would then define mutant sequences that differ from the wild type. Given that a sequence that is considered to be wild type may be arbitrarily chosen and applicants have not designated what the wild type sequence would be, the metes and bounds of the claims remain unclear.

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2. Applicants' arguments filed July 10, 2007 have been fully considered but they are not persuasive. Applicants assert that the amendment of the claims should overcome the rejection.

The Examiner maintains that the rejection is proper for the reasons set forth above.

3. Claims 43, 46, 47 and 50 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention for the reasons set forth in the last office action with the exception that the claims are no longer limited to use of a mutant fatty acid desaturase that is a dominant negative mutation. However, the specification does not provide guidance with regard to identification and use of fatty acid desaturases that have been mutated compared to an unspecified wild type form.

4. Applicants' arguments filed July 10, 2007 have been fully considered but they are not persuasive. Applicants assert that Example 4 at page 67 discloses transforming a plant with a gene that has been mutated by eliminating one or more histidine residues and that Figures 9A and 9B disclose amino acid sequences from several fatty acid desaturases. The Examiner maintains that Example 4 discusses modifying hydroxylase by eliminating one or more histidine residues, and that the specification merely suggests transforming a plant, but does not provide any examples. In addition, Figures 9A and 9B make evident the variability of amino acid sequences in various desaturases, while none is designated as a wild type sequence for the purpose of comparison to a mutant.

Claim Rejections - 35 USC § 102

5. Claims 43, 44, 46 and 50 are rejected under 35 U.S.C. 102(e) as being anticipated by Lightner et al (U.S. Patent 6,372,965) for the reasons set forth in the last office action.

6. Applicants' arguments filed July 10, 2007 have been fully considered but they are not persuasive. Applicants assert that Lightner et al do not disclose a mutant fatty acid desaturase in which one or more of the histidine residues has been mutated or introduction of such a nucleic acid into a plant. The Examiner maintains that given uncertainty with regard to what is encompassed by the mutant fatty acid desaturase, as discussed above, the prior art anticipates the claims. In addition, the evidence for non-obviousness must be commensurate with the scope of the claims.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

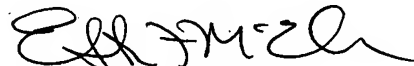
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No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth F. McElwain whose telephone number is (571) 272-0802. The examiner can normally be reached on increased flex time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on (571) 272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Elizabeth F. McElwain
Primary Examiner
Art Unit 1638

EFM